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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/490,965    01/24/00    HELLER    M    249/292

022249  
LYON & LYON LLP  
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633 WEST FIFTH STREET  
LOS ANGELES CA 90071-2066

HM22/1212

EXAMINER

MARSCHEL, A

ART UNIT	PAPER NUMBER
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1631

DATE MAILED:

12/12/00

3

**Please find below and/or attached an Office communication concerning this application or proceeding.**

**Commissioner of Patents and Trademarks**

# Office Action Summary

Application No.

09/490,965

Applicant(s)

Heller et al.

Examiner

Ardin Marschel

Group Art Unit

1631



☐ Responsive to communication(s) filed on \_\_\_\_\_

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 1 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

## Disposition of Claim

☒ Claim(s) 82-91 is/are pending in the applicat

Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration

☐ Claim(s) \_\_\_\_\_ is/are allowed.

☐ Claim(s) \_\_\_\_\_ is/are rejected.

☒ Claim(s) 1-81 and 92-94 have been canceled. ~~are rejected to~~

☒ Claims 82-91 are subject to restriction or election requirement.

## Application Papers

☒ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some\* ☒ None of the CERTIFIED copies of the priority documents have been

☐ received.

☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

☐ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_

☐ Interview Summary, PTO-413

☒ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

— SEE OFFICE ACTION ON THE FOLLOWING PAGES —

Restriction to one of the following inventions is required under 35 U.S.C. § 121:

I. Claim 82, drawn to methods of electronically controlling genetic typing, classified in Class 435, subclasses 4, 5, 6, and/or 7.1. If this Group is elected then the below summarized specie election requirement is also required.

II. Claims 83-91, drawn to methods of electronically controlling an enzymatic reaction, classified in Class 435, subclass 173.2. If this Group is elected then the below summarized specie election requirements are also required.

**Specie election requirement regarding Group I above:**

This application contains claims directed to the following patentably distinct species of the claimed invention: Genetic typing may be detected via the detection of binding of distinct species, such as DNA, RNA, protein, or other biomolecules; one of which must be elected regarding this requirement. These various biomolecules bind with different conditions, selectivity, relationships to the genetics of the organism being typed and thus are distinct species.

Applicant is required under 35 U.S.C. § 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, claim 82 is generic.

Applicant is advised that a response to this requirement must include an identification of the species that is elected

consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 C.F.R. § 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. M.P.E.P. § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. § 103 of the other invention.

**Specie election requirement regarding Group II above:**

This application contains claims directed to the following patentably distinct species of the claimed invention:

Firstly, a Specie A must be elected: Distinct species of substrate upon which the enzyme of the invention acts must firstly be elected. For example, nucleic acid or polypeptide.

Secondly, a Specie B must be elected: Distinct species of enzyme which is being controlled in the claimed method must secondly be elected. For example, such enzymes are listed in instant claims 85-87.

It is noted that distinct Species of substrate and enzyme for an the enzymatic reaction are included within the claims. Each such combination of substrate/enzyme generally require

different reaction conditions, cofactors, electronic charge magnitude and potentially sign of the charge. Also, enzymes and their respective substrates are generally described in separate literature publications thus supporting the specie election requirement in that the undue search burden for all such combinations covers a vast multitude of publications as compared to searching for a single enzyme type with its substrate.

Applicant is required under 35 U.S.C. § 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, claim 83 is generic.

Applicant is advised that a response to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 C.F.R. § 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. M.P.E.P. § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. § 103 of the other invention.

The inventions are distinct, each from the other because of the following reasons:

The distinctness between the species in the various specie elections have already been summarized above. Groups I and II are directed to different and distinct reaction methodology in that Group I is generally a binding detection reaction whereas Group II utilizes enzyme reaction for the controlled reaction type. Binding and enzyme reactions are generally separately described and thus the search burden for searching them together versus separately is undue, especially considering the multitude of literature publications which are each directed to the separate method types of Groups I and II. Thus, the restriction between the methods of Groups I and II is reasonably supported.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

Applicant is advised that the response to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR § 1.143).

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 C.F.R. § 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a diligently-filed petition

under 37 C.F.R. § 1.48(b) and by the fee required under 37 C.F.R. § 1.17(h).

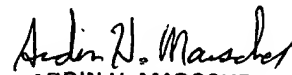
Papers related to this application may be submitted to Technical Center 1600 by facsimile transmission. Papers should be faxed to Technical Center 1600 via the PTO Fax Center located in Crystal Mall 1. The faxing of such papers must conform with the notices published in the Official Gazette, 1096 OG 30 (November 15, 1988), 1156 OG 61 (November 16, 1993), and 1157 OG 94 (December 28, 1993) (See 37 CFR § 1.6(d)). The CM1 Fax Center number is either (703)308-4242 or (703)305-3014.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ardin Marschel, Ph.D., whose telephone number is (703)308-3894. The examiner can normally be reached on Monday-Friday from 8 A.M. to 4 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Woodward, can be reached on (703)308-4028.

Any inquiry of a general nature or relating to the status of this application should be directed to Patent Analyst, Tina Plunkett, whose telephone number is (703)305-3524 or to the Technical Center receptionist whose telephone number is (703)308-0196.

December 6, 2000

  
ARDIN H. MARSCHEL  
PRIMARY EXAMINER